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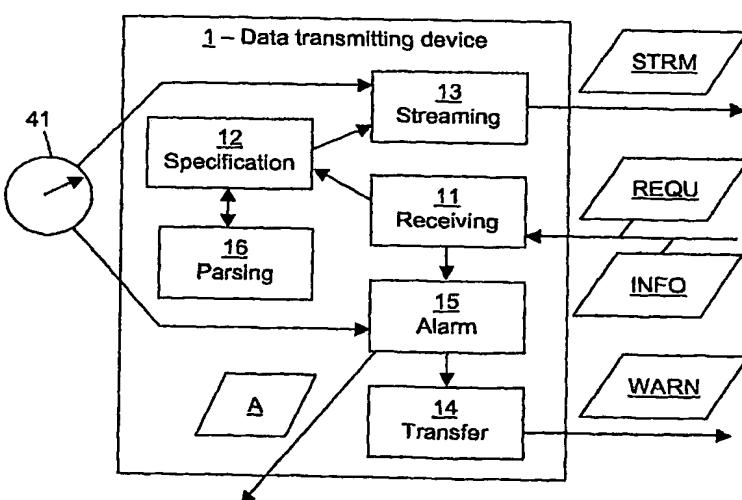
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(54) Title: DATA REQUESTING AND TRANSMITTING DEVICES AND PROCESSES



(57) Abstract: The present invention concerns data requesting and transmitting devices and processes. It relates notably to a data transmitting device (1) comprising means for receiving (11) requests (REQU) of determined data from a requesting device, specification means (12) for determining at least one size of successive portions of those data, and means for triggering streaming (13) of the data portions to the requesting device. The receiving means receive information (INFO) representative of capacities of the requesting device, and the specification means (12) determine the portion size and at least one delay between two successive sending steps of those portions, in function of that information. Thus, the streaming means periodically trigger streaming of the data portions, with a period equal to that delay Application to VOD.

## INTERNATIONAL SEARCH REPORT

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IPC 7 H04N7/173

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## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)  
IPC 7 H04N H04L

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EPO-Internal, WPI Data, PAJ, INSPEC, COMPENDEX

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	US 2002/004840 A1 (FUJITA TAKAHISA ET AL) 10 January 2002 (2002-01-10) figure 2 abstract paragraph '0117! - paragraph '0122! paragraph '0131! - paragraph '0144! paragraphs '0153!, '0175! ----- US 5 870 134 A (BARAN PAUL ET AL) 9 February 1999 (1999-02-09) abstract column 1, line 15 - line 35 ----- -/-	9, 14
Y	----- 1-8, 10-13, 15	
Y	----- 1-8, 15	

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## C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	US 5 822 524 A (HUANG SHIOW-LAANG ET AL) 13 October 1998 (1998-10-13) abstract column 3, line 64 – column 4, line 9 column 4, line 65 – column 5, line 67 column 8, line 62 – column 9, line 6 _____	2-5, 10-13

**INTERNATIONAL SEARCH REPORT**  
Information on patent family members

International Application No  
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Patent document cited in search report		Publication date		Patent family member(s)		Publication date
US 2002004840	A1	10-01-2002	EP JP	1182875 A2 2002084339 A		27-02-2002 22-03-2002
US 5870134	A	09-02-1999	AU WO US	6344598 A 9839921 A1 6075972 A		22-09-1998 11-09-1998 13-06-2000
US 5822524	A	13-10-1998		NONE		